

CLAIMS

1. A semiconductor device having a music generation function comprising:
movement section identification means for identifying, from image data of an
5 object continuously imaged and inputted as image data for each frame, each position where
the object has moved within the frame, and
music generation means for generating music data corresponding to the position
identified by the movement section identification means.
- 10 2. The semiconductor device having a music generation function according
to claim 1, wherein said music generation means generates the music data from a sound
source of a music instrument which corresponds to the position identified by the movement
section identification means.
- 15 3. The semiconductor device having a music generation function according
to claim 1, wherein said music generation means generates music data by a scale which
corresponds to the position identified by the movement section identification means.
4. The semiconductor device having a music generation function according
20 to claim 1, wherein said movement section identification means identifies the position by
comparing the image data in a plurality of the frames.
5. The semiconductor device having a music generation function according
to claim 2, wherein said movement section identification means identifies the position by
25 comparing the image data in a plurality of the frames.

6. The semiconductor device having a music generation function according to claim 3, wherein said movement section identification means identifies the position by comparing the image data in a plurality of the frames.

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7. A mobile electronic device comprising:
the semiconductor device having a music generation function according to claim 1,
and
imaging means for inputting the image data.

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8. A mobile electronic device comprising:
the semiconductor device having a music generation function according to claim 2,
and
imaging means for inputting the image data.

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9. A mobile electronic device comprising:
the semiconductor device having a music generation function according to claim 3,
and
imaging means for inputting the image data.

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10. A mobile electronic device comprising:
the semiconductor device having a music generation function according to claim 4,
and
imaging means for inputting the image data.

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11. A mobile electronic device comprising:
the semiconductor device having a music generation function according to claim 5,
and
imaging means for inputting the image data.

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12. A mobile electronic device comprising:
the semiconductor device having a music generation function according to claim 6,
and
imaging means for inputting the image data.

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13. The mobile electronic device according to claim 7 further comprising
means for outputting the music data generated by the music generation means.

14. The mobile electronic device according to claim 7 further comprising:

15 image processing means for processing the image data inputted by the imaging
means corresponding to the position identified by the movement section identification
means, and

display means for displaying the image data processed by the image processing
means.

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15. The mobile electronic device according to claim 10 further comprising
means for outputting the music data generated by the music generation means.

16. The mobile electronic device according to claim 10 further comprising:

25 image processing means for processing the image data inputted by the imaging

means corresponding to the position identified by the movement section identification means, and

display means for displaying the image data processed by the image processing means.

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17. A mobile telephone device comprising:
the semiconductor device having a music generation function according to claim 1,
imaging means for inputting the image data, and
means for outputting the music data generated by the music generation means.

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18. A mobile telephone device comprising:
the semiconductor device having a music generation function according to claim 2,
imaging means for inputting the image data, and
means for outputting the music data generated by the music generation means.

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19. A mobile telephone device comprising:
the semiconductor device having a music generation function according to claim 3,
imaging means for inputting the image data, and
means for outputting the music data generated by the music generation means.

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20. A mobile telephone device comprising:
the semiconductor device having a music generation function according to claim 4,
imaging means for inputting the image data, and
means for outputting the music data generated by the music generation means.

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21. A mobile telephone device comprising:
the semiconductor device having a music generation function according to claim 5,
imaging means for inputting the image data, and
means for outputting the music data generated by the music generation means.

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22. A mobile telephone device comprising:
the semiconductor device having a music generation function according to claim 6,
imaging means for inputting the image data, and
means for outputting the music data generated by the music generation means.

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23. A spectacle instrument comprising:
the semiconductor device having a music generation function according to claim 1,
imaging means for inputting the image data, and
means for outputting the music data generated by the music generation means.

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24. A spectacle instrument set comprising:
the semiconductor device having a music generation function according to claim 1,
a music output device for outputting the music data generated by the music
generation means, and

20 a spectacle instrument having imaging means for inputting the image data and
means for transmitting the image data inputted by the imaging means to the semiconductor
device.

25. A spectacle instrument set comprising:
25 the semiconductor device having a music generation function according to claim 3,

a music output device for outputting the music data generated by the music generation means, and

a spectacle instrument having imaging means for inputting the image data and means for transmitting the image data inputted by the imaging means to the semiconductor device.

26. A spectacle instrument set comprising:

the semiconductor device having a music generation function according to claim 4,

a music output device for outputting the music data generated by the music generation means, and

a spectacle instrument having imaging means for inputting the image data and means for transmitting the image data inputted by the imaging means to the semiconductor device.

27. A spectacle instrument set comprising:

the semiconductor device having a music generation function according to claim 5,

a music output device for outputting the music data generated by the music generation means, and

a spectacle instrument having imaging means for inputting the image data and means for transmitting the image data inputted by the imaging means to the semiconductor device.